Emergency Operations Plan For

Wallops Flight Facility (WFF)

Effective: 26 July 2011



National Aeronautics and Space Administration

Goddard Space Flight Center
Wallops Flight Facility
Wallops Island, Virginia 23337

Check the Code 803 WEB SITE AT
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CONCURRENCE AND APPROVAL

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1.0 INTRODUCTION

1.1 Purpose

This Emergency Operations Plan (EOP) establishes procedures and responsibilities to respond to, recover from, prepare for and mitigate major emergencies and to minimize the loss of life, equipment, facilities, and operational capability caused by natural or technological disasters occurring at Wallops Flight Facility (WFF). The WFF-EOP establishes uniform policy guidelines for response to major emergencies in which numerous emergency response forces and supporting agencies are involved. Supporting agencies may include contractor personnel, local, State, and Federal response agencies.

This NASA-WFF Plan implements the National Response Framework (NRF) and complies with the requirements in the National Incident Management System (NIMS).

All members of the incident command, emergency response personnel and members of the executive management team (EMT) at WFF should be familiar with the contents of the EOP and should maintain their assigned copies in a current and available condition to ensure their readiness to implement corrective or continuing actions for all potential/actual emergency/disaster situations. A current copy of this EOP is maintained on the WFF Safety and Mission Assurance, Emergency Operations Center (EOC) website: http://sites.wff.nasa.gov/code803/emergencyplans.php

1.2 Applicability

The provisions of this plan apply to the National Aeronautics and Space Administration (NASA)/WFF, Navy Surface Combat Systems Center (SCSC), National Oceanic and Atmospheric Administration (NOAA), Mid-Atlantic Regional Spaceport (MARS), United States Coast Guard and NASA/Navy Contractor organizations associated with WFF.

1.3 Authority

- a. <u>Executive Order 12472</u>, Assignment of National Security and Emergency Preparedness Telecommunications Functions, (3 Code of Federal Regulations (CFR) 1984 Compilation).
- b. <u>Executive Order 12656</u>, November 18, 1988, Assignment of Emergency Preparedness Responsibilities,
- c. <u>National Response Framework</u>, January 2008, Federal Emergency Management Agency (FEMA).
- d. <u>National Incident Management System (NIMS)</u>, December 2008, Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA),
- e. NPD 8710.1, Emergency Preparedness Program.
- f. NPR 8715.2, NASA Emergency Preparedness Plan Procedural Requirements.

g. GPR 8715.6, Wallops Flight Facility Safety, Occupational Health, and Emergency Preparedness Programs

1.4 References

- a. OSHA Hazardous Waste Operations and Emergency Response, 29 CFR Part 1910, Section 1910.120 (q), Emergency Response to Hazardous Substance Releases.
- b. NPR 8715.2, NASA Emergency Preparedness Procedural Requirements.
- c. WFF Information Technology & Communications Office, WFF Land Radio Users Reference Guide
- d. 803-Plan-0001, WFF Aircraft Mishap Response Plan
- e. 803-Plan-0002, WFF Hurricane/Nor'easter Plan
- f. 803-Plan-0007, Security Emergency Procedures
- i. 840-WI-8715.1.1, Severe Weather Notification
- j. WFF Snow Plan, https://wiims.wff.nasa.gov/wiims-wiki/en/Wallops_Snow_Plan
- 1. WFF Integrated Contingency Plan, Plan 37.01.01.13697

1.5 Situation and Assumptions

Local hazards or emergency incidents can disrupt WFF operations, cause damage, and create causalities. Natural hazards include hurricanes, tropical depressions, Tornados, fires, and winter storms. Other disaster situations can develop from an environmental or hazardous material incident, fire, transportation accident, terrorism, civil disorder, violence in the workplace, rocket launch or aircraft mishaps, toxic fuels or explosives mishaps, or the threat of nuclear/conventional attack. A matrix of possible hazards and threats and their likelihood of occurrence is provided in Table 1 below.

Worst Case Events: Historically, the Eastern Shore of Virginia has experienced severe storms to include hurricanes and Nor'easter storms which could be a devastating event resulting in significant damage and loss of life. Other significant emergency evens are the possibility of rocket launch failures from Wallops Flight Facilities launch facilities.

Note: Hazards Threats which are medium to low likelihood are generally covered in Fire Department Operational Guidelines (DOG's) for Fire type threats or Security Standard Operating Procedures (SOP's) for Security type threats

Table 1 - Hazard/Threat Matrix

Possible Hazard/ Threat	Likelihood	Vulnerability	Worst Threats	Comments
Severe Weather/Hurricane /Nor'easter	High	Disaster	X	Worst Case: Hurricane or Nor'easter Response is documented in WFF Hurricane/Nor'easter plan: 803-PLAN-0002
Facility Fires	Medium	Emergency		
Explosions/Fires	Medium	Disaster		
Launch Emergencies	High	Disaster	X	Worst Case: Launch failure of a major rocket system Response is documented in Launch Incident plan Developed Launch specific
Radiological Emergencies	Low	Emergency		
Chemical/ Biological Incident	Low	Disaster		
Aircraft Accidents or declared emergencies (including unmanned aerial vehicles)	High	Disaster		Response is documented in the Aircraft Mishap Response Plan: 803-PLAN-0001
Terrorism	Low	Emergency	Y	
Vandalism	Medium	Emergency		

Possible Hazard/ Threat	Likelihood	Vulnerability	Worst Threats	Comments
Violence in the workplace	Medium	Emergency		
Civil Disorder	Low	Emergency		
Structural Fire	Medium	Emergency		
Severe thunderstorms with lightning	High	Emergency		Response is documented in the Severe Weather Notification Instruction: 840-WI-8715.1
HAZMAT Incident	High	Emergency		Response is documented in the Hazardous Materials Response: Appendix E of this plan
Flu Pandemic	Low	Emergency		Response is documented in the GSFC Pandemic Response Plan:
Wildfires	Low	Emergency		
Hazardous materials and Oil spills	High	Emergency		Response id documented in the Hazardous Materials Response: Appendix E of this plan
Mass Casualty Emergencies	Low	Disaster		Response is documented in Fire Department Operating Guidelines
Weapons of Mass Destruction	Low	Disaster		
Loss of Utilities	Medium	Emergency		

1.6 NASA/WFF Organizational and Personnel Responsibilities

1.6.1 WFF Executive Management Team (EMT)

Threats which impact a major portion of the installation or an off-range impact of major rocket systems will generally require the establishment of an EMT chaired by the WFF Facility Director. The EMT has the authority to change or modify the WFF-EOP and annexes as the situation dictates. The EMT will evaluate risk to personnel, property and to

on-going operations. The EMT is made up of management personnel from each directorate, prime contractors, and tenant organizations.

During an emergency situation, the EMT will develop a plan of action for the emergency which will include information on what notifications are made, what message is sent, verifications that personnel are in safe locations, how control will be maintained during a shutdown, assurance that a communications plan is in place for the emergency, verification of the process to recall necessary personnel and steps for site re-opening.

1.6.2 Director of WFF

- a. Makes or approves all final policy decisions regarding emergency or disaster matters affecting WFF.
- b. Chairs the WFF EMT.
- c. Appoints an Emergency Management Coordinator for WFF.

1.6.3 WFF, Chief of Safety (Code 803)

- a. Concurs on the WFF EOP and any other supporting emergency management operational plans.
- b. Provides support to Incident Command System (ICS) by providing a primary and alternate Safety Officer.

1.6.4 NASA Emergency Management Coordinator (Code 803)

- a. Administers the ICS and serves as the primary advisor to senior WFF leadership relative to the Incident Management System.
- b. Appoints the Incident Commanders (IC) for given types of situations. Typically, the Fire Chief (WICC Fire Department) handles natural disasters, the Security Officer (code 240) handles security issues, and the Fire Chief (WICC Fire Department) handles chemical, oil releases or errant rocket launches.
- c. Coordinate the response activities, track actions, prepare situation reports (SITREPS) and keep contact with NASA HQ and other emergency operations centers during EOC activation and emergency situations.
- c. Manages the emergency management program covered by this plan.
- d. Reviews the IC report after any exercise or emergency response activity to ensure that recommendations deemed appropriate are documented for corrective or preventive action and tracked through closure.

e. Serve as the GSFC Emergency Management Task Group (EMTG) member for WFF.

1.6.5 Office of Human Capital Management (OHCM) (Code 110)

- a. Executes responsibilities for leave administration, hours of duty and employee notification during emergency preparedness operations as follows:
 - (1) Leave Administration: In an emergency situation, the performance and work life dynamics office (Code 115) sets policies and guidelines appropriate to ensure proper usage of leave and overtime.
- b. Ensures that all OHCM vital records, not maintained electronically, are maintained for expeditious deployment to an alternate facility in support of WFF Continuity of Operations Plan (COOP).

1.6.6 WFF Office of Public Affairs (Code 100)

- a. Provides support to the ICS by providing a NIMS trained representative to the EOC.
- b. Ensures that the designated member of the EOC meets the required qualification/ training requirements as specified in Appendix B, WFF Functional Annexes of Plans.

1.6.7 Management Operations Directorate (Code 200)

- a. Provides support to the ICS by providing representation to the EOC (logistics, fire, environmental, security).
- b. Provides logistic management support for EOC operations to include WICC technician's support.

1.6.8 WFF Fire Department (WICC)

- a. The Fire Chief or senior officer shall be the IC and will be responsible for the safe conduct of all emergency response operations when appointed and appropriate for the type event.
- b. Provides emergency fire and response services as required.
- c. Provides support to the ICS by providing representatives to the EOC.
- d. After each annual exercise (drill) that involves fire department support, and when serving as IC, the Fire Chief shall provide a report to the Emergency Coordinator that includes recommendations to correct, modify or improve emergency response operations and written procedures.

1.6.9 WFF Office of Protective Services (Code 240)

- a. Provides security services as required.
- b. Provides support to the ICS by providing representatives to the EOC.
- c. Maintains preparedness to serve as the IC primarily for law enforcement events and acts of terrorism.

1.6.10 Contract Project Manager (WICC General Manager)

- a. Ensures the WICC contractor is prepared for and performs NASA-established requirements assigned to the WICC Contractor at WFF.
- b. Fulfills WICC Contract responsibilities covered in this plan and further specified in the contract.

1.7 Succession of Authority

To ensure continuity of operations during an emergency/disaster situation the normal order of succession to the WFF Director will be: the Deputy Director of Suborbital and Special Orbital Projects Directorate, and then the Assistant Director of Management Operations Directorate. The WFF Continuation of Operations Plan (COOP), should be consulted for additional information on the WFF succession procedures.

1.8 Vital Records

Vital records must be protected to provide normal operations following a disaster. Vital records consist of both written documents and electronic files. These include documents, reflecting parties' rights and interests such as contract, property, personnel and payroll records and those other records essential to operations and/or the restoration thereof. The principal causes of damage to records are fire and water; therefore essential records should be protected accordingly. Each organization is responsible for developing suitable written plans or procedures to ensure records are afforded an appropriate level of protection against loss or destruction, commensurate with their importance and the directed records management requirements. During the annual COOP awareness briefing, each directorate head should ensure these written plans or procedures are in place and up-to-date.

- a. Employee personnel records are maintained electronically in the Electronic Official Personnel Folder (EOPF) system by the NASA Shared Services Center (NSSC).
- b. WFF Continuation of Operations Plan (COOP), should be consulted for additional information on WFF vital records.

2.0 WFF EMERGENCY MANAGEMENT SYSTEM

2.1 Concept of Operations

WFF has designed an ICS to enable effective and efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. The WFF Emergency Management System is intended to provide a basis for the coordinated management of disaster incidents to minimize impacts to people, government property, and WFF infrastructure and ensure normal conditions can be restored as rapidly as possible. Additionally, the WFF Incident Management System will remain readily adaptable to new technology.

The ICS is based on the principles and characteristics detailed in the NIMS. Therefore, the five components of the NIMS are used to form the foundation of WFF emergency and incident response. These components include:

- Command and Management
- Preparedness
- Communications and Information Management
- Resource Management
- Ongoing Management and Maintenance

Detailed procedures for evacuation, recovery and hazardous materials response are included as appendices to this plan. Larger plans, such as the WFF Hurricane/Nor'easter plan, are included as functional annexes to this plan. Appendix B of this plan lists all functional annexes. Other emergency plans, standard operating procedures, or checklists as required by all emergency response elements will also supplement this plan.

All WFF directorates are responsible for developing and maintaining current internal plans and procedures for carrying out the assigned emergency functions described in this plan and also described in the functional annex plans referenced in this document.

2.2 National Incident Management System / Incident Command System (NIMS/ICS)

The NIMS/ICS is the organizational structure which provides coordination and direction during emergencies. The ICS is based on the principles and characteristics detailed in the NIMS.

An IC will direct the emergency response efforts for WFF. Normally, the IC is the Fire Chief or Senior Fire Official (SFO) on scene. In the case of security events the Senior Security Officer shall be the IC. For natural disasters and emergencies, the WFF Director will direct implementation through the EMT.

The IC has the capability and authority to:

- Assume command and control of emergency operations/response
- Assess the situation
- Implement WFF-EOP
- Determine response strategies
- Activate resources
- Order an evacuation of the affected areas
- Oversee all incident response activities
- Declare termination of the incident

2.3 Activation of WFF Incident Command System

The WFF EOC serves as a centralized management and support center for emergency operations. It is activated at the discretion of the IC, WFF Facility Director, or the Emergency Management Coordinator (EMC). EOC activation is dependent on the emergency situation. Specific plans, such as the WFF Hurricane/Nor'easter Plan or Launch Incident Plans when written for specific launches, specifically states at which point in a specific emergency situation when the EOC will be activated. The EOC will act as the focal point for gathering information, implementing plans, disseminating information and coordinating support. A team of varied agencies may be called to the EOC to coordinate resources requested by the IC. Once activated, the EOC will:

- Coordinate resources necessary to support the IC.
- Provide status reporting and update to WFF Organizational management authorities.
- Notify and report to outside authorities as required.

For major emergencies, the EMT will be convened and will have the ultimate authority to change or modify procedures as the situation dictates.

2.4 WFF Emergency Plans

This WFF EOP contains appendixes of the following responses and procedures:

- Evacuation Procedures (Appendix C)
- Recovery Procedures (Appendix D)
- Hazardous Materials Response (Appendix E)

Attachment B of this plan contains a list of functional annexes of plans that are incorporated by reference to this overall WFF EOP.

3.0 COMMAND AND MANAGEMENT

3.1 Purpose

The Command and Management component of the NIMS is designed to enable effective and efficient incident management by providing WFF leadership with a flexible core mechanism for coordinated and collaborative actions in the event of an incident. The WFF Incident Management System will adhere to the following principles:

- Safety
- Incident response
- Scalable to adapt to various incidents
- Measurable objectives

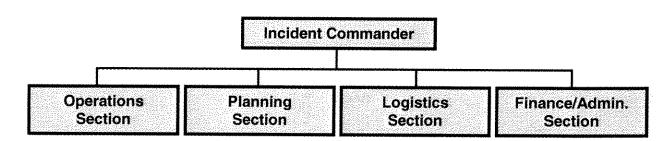
3.2 Concept of Operations

Incident Commander (IC) Designation: ICS is "scene specific." The function of the IC is to provide overall management at the incident site, including public safety and public information actions. The IC will be selected based on the scale and complexity of the incident. The IC will coordinate all emergency activities at the scene and will be responsible to the WFF Emergency Management Coordinator.

The Emergency Management Coordinator will plan and coordinate pre-incident activities and training, and will develop, organize, equip, and maintain an adequate EOC.

The EOC will be scaled to the nature, extent and complexity of the incident. Depicted in this plan is the foundation organization; however, it will expand and/or contract as the incident matures. The staffing of the EOC for launch may look completely different from that of staffing for a hurricane however; the basis for the structure will be based on the ICS. (See Table 2 and 3).

Table 2 - ICS Structure



The EOC team will consist of management and staff personnel, with the necessary skills, knowledge, and decision-making authority required to effectively support field elements that respond to a crisis situation.

The EOC shall be the primary assembly location for the representatives of all supporting organizations. (Fire, Security, and Safety shall be the only primary elements to respond directly to the incident).

Additional Contingency Support Staff (CSS) members may be called to the EOC as needed. For major emergencies, The EMT will be convened to provide buy-in with the major stakeholders. See Table 3 for WFF EOC Management Resources and secondary resources.

Primary **EMT** Team Navy WICC WICC 911 Dispatch WFF NASA Emergency Fire/Emergency Security EOC Preparedness Medical Service Secondary Resources WICC NASA/SCSC Health Unit **WICC Facilities** -NASA Safety Engineering Services -Range Safety -WICC Safety Others: -NASA -Navy WICC Logistics -Coast Guard Equipment -FBI -County Resources

Table 3 - WFF EOC Management Resources

3.3 EOC Staff Roles and Responsibilities

The ICS establishes a basic organizational structure used by all agencies across the country in staffing of EOC's. Only functions/positions that are necessary to be filled will be filled specific to the type of incident. At WFF these EOC positions may include the following:

3.3.1 Emergency Manager

The Emergency Manager is responsible for:

- a. Establishing incident management objectives and strategies.
- b. Ensuring that all functional areas are directed toward accomplishment of the strategy.
- c. Performing the planning function inherent in the WFF ICS covered by this plan in concert with the Emergency Management Coordinator.
- d. Ensuring the complete preparation of Incident Action Plans and ensuring the successful accomplishment of assigned tasks and objectives.
- e. Completing the required training prior to assuming duties as Emergency Manager (See Table 7A).

3.3.2 Deputy Emergency manager

A Deputy Emergency manager may be appointed by the Emergency Management Coordinator or Emergency Manager if the incident is assessed to be enduring such as in a hurricane or other disaster that will have a long-term recovery effort. The Deputy Emergency Manager will perform all tasks associated with the duties of the Emergency Manager and those tasks directed by the Emergency Management Coordinator or IC.

3.3.3 Contracting Officer

The Contracting Officer Shall:

- a. Perform the procurement functions as required by the ICS with contractor support.
- b. Be prepared to participate in exercises and training as required.
- c. Maintain current contact information with supervisor.
- d. Complete the required WFF ICS training prior to assuming duties (See Table 7A).

3.3.4 Human Capital Representative(s)

The Human Capital Representative(s) Shall:

- a. Perform the human capital support functions as outlined in section 1.6.5.
- b. Be prepared to participate in exercises and training as required.
- c. Maintain current contact information with the OHCM supervisor at Greenbelt.
- d. Complete the required WFF ICS training prior to assuming duties (See Table 7A).

3.3.5 Financial Officer

The Financial Officer Shall:

- a. Manage all financial aspects of the incident for NASA.
- b. Be prepared to participate in exercises and training as required.
- c. Maintain current contact information with supervisor.
- d. Complete the required WFF ICS training prior to assuming duties (See Table 7A).

3.3.6 Logistics Officer

The Logistics Officer Shall:

- a. Manage the logistics support such as facilities, transportation, communications, supplies, equipment maintenance and fueling, food services, medical services and all off incident resources for the incident.
- b. Be prepared to participate in exercises and training as required.
- c. Maintain current contact information with supervisor.
- d. Complete the required WFF ICS training prior to assuming duties (See Table 7A).

3.3.7 Security Chief

The Security Chief Shall:

a. Perform the tasks associated with this position as outlined in Section 1.6.9.

- b. Be prepared to participate in exercises and training as required.
- c. Maintain current contact information with supervisor.
- d. Complete the required WFF ICS training prior to assuming duties (See Table 7A).

3.3.8 Public Affairs Officer (PAO)

The PAO Shall:

- a. Conduct interface with the public as required by the IC.
- b. Be prepared to participate in exercises and training as required.
- c. Maintain current contact information with PAO supervisor.
- d. Complete the required WFF ICS training prior to assuming duties (See Table 7A).

3.3.9 Fire Chief

The Fire Chief Shall:

- a. Perform the tasks associated with this function as an advisor to the Emergency Manager.
- b. Function as the IC during Fire related incidents.
- b. Complete the required WFF ICS training prior to assuming duties (See Table 7A).

3.4 EOC Location

When the EOC is activated it shall be activated in Building E-107, Room 104. This facility will be the central communications point for emergency situations at WFF and will serve as the command control and coordination center for all WFF activities involved in or affected by the situation. Fire and security dispatch occurs in Building B-129. An alternate dispatch is located in Building F-2, Communications Room 117 with an alternate EOC located in the Range Control Center.

3.5 Incident Types

WFF will update incident typing in all emergency response processes and policy to follow NIMS when the type incident occurs. Updates will be coordinated with all tenant activities. The DHS categorizes incidents by complexity. There are five types identified, with Type 5 incidents being the least complex and Type 1 the most complex.

- a. Notification, except for type 5 incidents, will include a designated Emergency Coordinator. The Emergency Management Coordinator will be the point-of-contact (POC) for all incident actions and information as described in section 1.6.4 of this document.
- b. Notification will be by incident type using the code message (and/or e-mail) to the following pre-designated groups:
 - Group 1:Responders
 - Group 2: Leadership
 - Group 3: Recovery and Assessment

The WFF Fire Department will maintain the messaging software tool as part of the fire department dispatch center.

c. Table 4 list the Incident types, notification protocol and type command used at WFF.

Table 4 - Type Incident, Notification Protocol and Command

Incident Type	Definition	Examples	Notification Protocol	Command
Type 5	One or two single resources (resources are generally defined as WICC SOW areas, and an individual fire station is one resource) with up to six personnel. EOC positions (other than the IC) are not activated. Incident is contained within the first operational period and often within a few hours after resources arrive on scene. (Operational periods reflect a single work shift or the amount of time before which a fresh team and command structure must be implemented.)	WFF examples include false alarm, mutual aid response, ambulance response to a non-NASA employee call, Non-catastrophic operations and maintenance incident, tenant security only incident, fire department response to an alarm with security back up but no suppression action required, non-emergency hazardous substance spill, security-only incident, ambulance response to a NASA employee call.	ECHO messaging to appropriate Flash Report group is the notification process. Status of the individual incident will be through the WFF Daily Emergency Services Report, or other internal organizational reporting if no emergency services were involved.	On-Scene IC only
Type 4	Two or more resources respond. EOC staff and general staff functions may be activated only if needed. Resources vary from a single module to several single resources. A Type 4 incident is limited to one operational period in the response phase. No written Incident Action Plan is required for non-HazMat incidents. A documented operational briefing is completed. If the NASA Emergency Preparedness Coordinator is not available, An Emergency Coordinator (WICC or Civil Servant), will be designated based on the nature	WFF Examples: Working Fire or HazMat event within the capabilities of the WFF fire department, then mutual aid not called. Emergency hazardous substance spill	ECHO messaging to appropriate Flash Report group is the notification process. Status of the individual incident will be through the WFF Daily Emergency Services Report and from the Emergency Coordinator. The Emergency Coordinator will coordinate and approve all external (external to GSFC) notification required. The Emergency Coordinator will establish a Meet-Me call-in line for Flash report personnel.	On-scene IC with Emergency Coordinator and Assessment Team

	and complexity of the event. The designated Emergency Coordinator will have completed NIMS and IS100 training and have verbal or written concurrence from Code 803 (NASA Emergency Management Coordinator).			
Type 3	Two or more resources respond. Some or all of the EOC, including an Emergency Coordinator will be activated, as well as Division or Group Supervisor and/or Unit Leader level positions. The incident may extend into multiple operational periods, and a written Incident Action Plan (IAP) may be required for each operational period.	WFF Examples: Very large hazardous substance spill requiring several days before the hazard is controlled. Marsh fire threatening Wallop Island assets	ECHO messaging to appropriate Flash Report Recipients is the notification process. Status of the individual incident will be through the WFF Daily Emergency Services Report and from the Emergency Coordinator. The Emergency Coordinator will establish a Meet-Me call-in line for appropriate flash report recipient personnel.	EOC provides overall Direction with Operations sections implementing.
Type 2	Regional and/or national resources are required to safely and effectively manage the operations. EOC positions are filled. Operations personnel typically do not exceed 200 per operational period, and the total does not exceed 500. The incident is expected to go into multiple operational periods. A written IAP is required for each operational period.	WFF Example: A catastrophic failure of a large rocket with toxic plume impacting the local community. A Category I or Category II hurricane landfall in the local area	ECHO messaging to appropriate Flash Report recipients is the notification process. Status of the individual incident will be through the WFF Daily Emergency Services Report and from the Emergency Coordinator. The Emergency Coordinator will establish a Meet Me call-in line for appropriate flash report recipient personnel.	EOC Provides overall direction with near-full Incident Management System implementation
Type 1	National resources are required to safely and effectively manage the operations. The emergency is likely an Incident of National Significance, which activates the National Response Plan. All EOC, Emergency Management Coordinator, and Command and General Staff positions are activated. The incident is expected to go into multiple operational periods. A written IAP is required for each operational period.	WFF Example: Catastrophic landfall of a Category 3 or above hurricane in the local area.	ECHO messaging to appropriate Flash Report group is the notification process. Status of the individual incident will be through the WFF Daily Emergency Services Report and from the Emergency Coordinator. The Emergency Coordinator will establish a Meet Me call-in line for appropriate flash report recipient personnel.	Initially at EOC but likely to be elevated nationally

3.6 Multi-Agency Coordination

The EOC will coordinate with other government agencies and contractors as appropriate. The EOC also will keep NASA HQ informed or, if established, the NASA Headquarters'

EOC. During major launches when the EOC is activated, there may be a need for County and State personnel to function as part of a unified command (UC).

3.7 Public Information

During incident situations, all interface with the public and media will be coordinated through the PAO. However, all releases will have concurrence by the Emergency Manager before release.

4.0 PREPAREDNESS

4.1 Concept of Operations

The WFF Incident Command System requires training and preparation of the teams that will be called upon to execute emergency operations in order to most effectively and efficiently manage future disasters and emergencies.

This training and preparedness is intended to:

- Establish emergency management personnel qualifications and certifications
- Establish an WFF emergency management exercise program
- Establish a planning and plans review schedule and methodology
- Establish mitigation measures and strategy
- Establish publication management procedures
- a. Emergency preparedness exercises will concentrate on high-threat emergencies such as severe weather and hurricane incidents, launch emergencies, aircraft accidents, and hazardous materials (HazMat) releases.
- b. Exercise objectives will center on known or suspected vulnerabilities.
- c. Written after action reports and improvement plans will be written by exercise evaluators (chosen before exercise) and sent to exercise participants for corrective actions. Any changes to the EOP and program as a result of exercise evaluations will be routed through the WFF EMT for input and approval.
- d. Preparedness and response activities will be coordinated with the GSFC Emergency Management Coordinator and all WFF Organizations.

4.2 Training

The Emergency Management Coordinator will conduct an aggressive training program to ensure that the organization is prepared to manage all incidents and emergencies that might occur and that ICS personnel are certified. The WFF ICS training and exercise requirements are contained in Appendix A.

4.3 Exercises

NPR 8715.2, "NASA Emergency Preparedness Plan Procedural Requirements", stipulates emergency exercise requirements that are to be conducted by WFF. The following is the outline of the WFF emergency exercise plan and the elements are detailed in Appendix A.

- a. WFF will conduct an alert and notification drill each quarter.
- b. WFF will conduct a COOP exercise each fiscal year prior to 1 June.

c. WFF ICS personnel will be prepared to participate in National Incident Response exercises as directed by NASA HQ.

4.4 Planning

This EOP serves as the foundation document for preparedness activities and, in the event of an incident, the basis for response. Therefore, this EOP, and its supporting plans and references, will be reviewed annually.

4.5 Mitigation

Mitigation activities are important elements of emergency management and provide a critical foundation across the incident management spectrum.

- a. The WFF Emergency Management Coordinator will provide an Employee Disaster Preparedness Brief in concert with the annual COOP Awareness Brief. This will be provided each year prior to 1 June.
- b. The Management Operations Directorate (Facilities Management Branch) will conduct an annual survey of all WFF facilities used as shelters to ensure that structures and facilities are capable of sustainment in hurricane-force winds and shelters that will be used during launch activities are adequate.

4.6 Publication Management

- a. The Emergency Management Coordinator will be responsible for developing the procedures for review, certification, and methods for publication control.
- b. Publications will include, but not be limited to:
 - This EOP
 - All Functional Annexes contained in Attachment B
 - WFF Emergency Operations Webpage: http://sites.wff.nasa.gov/code803/eocmain.html

5.0 RESOURCE MANAGEMENT

The mission of resource management is to provide a basis for the management and provision of critical resources and supplies in support of disaster response and recovery operations for WFF. The resource management function ensures that all responding departments at WFF manage people, equipment, facilities, and supplies to accomplish their tasks.

5.1 Concept of Operations

Based on NIMS, WFF has established processes that provide the Emergency Manager with timely and appropriate resources during an incident. During incidents, WFF resource management will take place in the EOC and in coordination with the Goddard Greenbelt campus and if Greenbelt is unavailable, the NASA Headquarters' EOC, when established. The IC, when designated, will prioritize and coordinate resource allocation and distribution. Resources for WFF will be managed using the computerized program "WEB EOC".

5.2 Assumptions

The following resource management assumptions apply:

- a. Shortages in resources for emergency response could occur in any emergency or disaster, particularly one that last longer than 24 hours.
- b. Private contractors and volunteer agencies may be able to assist WFF during an emergency or disaster.
- c. Support is available through requests to State and Federal agencies as well as to Goddard Greenbelt Campus and NASA Headquarters if the GSFC Greenbelt is unavailable.
- d. Under normal circumstances, required resources will be available within WFF to meet emergency operations needs.
- e. A larger scale emergency may result in the loss of WFF resources or quick exhaustion of WFF resources, requiring outside assistance from surrounding local, State, or Federal governments. Required resources may be available, but due to damaged facilities or damage or disrupted transportation and highway infrastructure, may not be accessible.
- e. Primary and alternate means of obtaining needed resources shall be developed for the type of emergency WFF will face. Resource tracking shall be provided in WEB EOC.

5.3 Pre-Incident

The WFF Management Operations Directorate will conduct an inventory of standby listing items and custodial inventory emergency supplies prior to 1 June of each year. Procurements will be executed, as required, to ensure adequate inventories are maintained.

WFF EOC Shall:

- a. Analyze resource requirements for WFF.
- b. Identify sources of equipment, manpower, and transportation for WFF.
- c. Track resources in the WEB EOC program.
- d. Coordinate with GSFC/ Greenbelt and NASA HQ on resource requirements prior to an incident.

5.4 Incident

During the incident, the initial assessment will identify resources required that cannot be met by on-hand inventories. The EOC will coordinate with WICC personnel to rapidly and efficiently obtain the required resources. The WICC EOC representative shall provide logistic management support for EOC operations to include WICC technician's support. All requests for support from other centers will be coordinated by the EOC through the established Greenbelt EOC, if established.

5.5 Post-Incident

After the incident is declared complete, contained, and/or mitigated, the EOC will reconcile procurement and distribution of resources activities through the appropriate Directorates for accountability.

6.0 COMMUNICATIONS AND INFORMATION MANAGEMENT

6.1 Concept of Operations

Communications within the WFF are dependent upon user and leased commercial telephone lines, the frequencies owned by NOAA, Navy and the US Coast Guard, and other limited back-up radio systems. These systems provide some redundancy to ensure the availability of communications during an emergency or disaster situation. The ability to provide sufficient communications to conduct emergency operations could become limited due to systems being damaged, destroyed, overloaded, or otherwise rendered inoperable.

- a. Assets such as cellular and satellite telephones are used during emergency situations. These phones shall be available for EOC operations. The EOC satellite phone number can be obtained from the WFF emergency Management Coordinator.
- b. Additionally the EOC and Fire Department dispatch incorporates a mutual aid radio system and frequencies for communications with Accomack County dispatch services and Chincoteague Island. This system can be utilized for communications with county resources.
- c. WFF will utilize the software program "Web EOC" to communicate within WFF and with outside agencies on emergency situations using the NIMS protocols.
- d. The EOC located in Room 104 of Building E-107 utilizes existing communications technologies and capabilities. Radios for internal communications will be on "Talk Group" frequencies. The EOC will be prepared to operate without normal land line telephone service and data communications.
- e. The key method of alerting and notification of WFF management is the Code Messaging process, which is used daily to keep managers informed of emergency response and key security events. Telephone, e-mail, satellite phone, and the base public address system will also be used.
- f. WFF maintains the NASA Emergency Notification System (ENS) which is utilized to communicate critical information to WFF employees via work phone, home phone, cell phone, pager, blackberry and other devices. This system can be utilized to send out instant emergency situation information to WFF employees. The system also incorporates a survey module which allows for communicating of survey type messages and allows for employee feedback to those messages. This system will be used for employee accountability during emergency situations.
- f. Emergency Public Information will be distributed through the WFF-EOC webpage, WFF e-mail system by the Emergency Management Coordinator and general public information, when appropriate, will be issued from the WFF Office of Public Affairs from the PAO.

6.2 Emergency Alert System

WFF maintains a base wide public address system which may be used to alert personnel of base wide emergencies. The following are the numbers to be used for this system:

- If on the Main Base, the system can be activated by dialing 55 on any facility phone.
- If on the Island, the system can be activated by dialing 56 on any facility phone.
- To send an Alert to radio pagers dial 57 on any facility phone.
- Dial 58 from any facility phone to alert Building V-10 and V-20.
- Dial 59 from any facility phone to alert Building V-24.

6.3 Emergency Warning System

WFF maintains a base wide Emergency Warning System which is used to alert personnel of pending weather related information as well as public address of emergency situations. This system consists of pole mounted speakers mounted in 7 locations throughout the main base, mainland and island. Dispatching of the weather warnings is conducted through the WFF fire department dispatch center with an alternate console located in the WFF EOC.

6.4 Situation Reporting

SITREPs use voice and other channels to notify GSFC Greenbelt and NASA HQ immediately of any event or incident that may attract international, national, local, or significant news media interest. SITREPs do not replace the requirement for more detailed reports such as accident or incident investigation reports. Submitting a SITREP report neither changes, nor substitutes for, any report required by other directives.

SITREP reports are to be completed as soon as practical. Copies of SITREPs that may impact partners' activities will be shared unless sensitive issues preclude the release. The WFF Functional Offices will continue to report to their GSFC and Headquarters counterparts. This procedure does not eliminate the normal reporting through the normal supervisory chain.

Event or Incident	Event or Incident Description	Situation Report	
1. Aircraft (Including Unmanned Aerial Vehicles) Events	IA. Aircraft & UAV Mishap. Any mishap involving civilian casualties or damage to civilian property. Type A: a. Vehicle Destroyed b. Damage of One million dollars c. Mishap resulting in a fatality.	HQ Report	
	1B. Type B: Damage of \$500,000 but less than\$2,000,000	HQ Report	
	1C. Objects dropped from NASA or NASA managed aircraft if casualties, property damage, or adverse publicity is likely	GSFC Report	
2. Launch Mishaps	2A. Rocket Mishap. Any ground or air-launched rocket mishap involving WFF resources, personnel or occurring while under WFF control or jurisdiction involving civilian casualties or damage to civilian property	HQ Report	

Table 5 - SITREP Matrix

	2B. Launch Mishap. Any mishap, failure, or destruction	GSFC Report
	happening to a missile during launch booster or satellite during	
	a space launch. Unexpected launch parameters (azimuth,	
	altitude, orbit). 2C. Mishaps causing launch facility damage, which may delay a	CCEC Days
	subsequent launch, or cause a degraded launch capability for six	GSFC Report
	months or more.	
3 Ground Events Or	3A Material Spills. Any spillage of fuel or other hazardous	GSFC Report
Incidents	materials under WFF control, if the incident is likely to have	
	adverse environmental consequences or elicit media coverage.	
	3B Ground Mishap.	HQ Report
	Type A: Mishap resulting in a fatality or damage in excess of	
	\$2,000,000	
	Type B: Permanent partial disability, hospitalization of three or	HQ Report
	more personnel or Damage of \$500,000 or more but less than	
	\$2,000,000 Damage \$50,000 or more property damage. Includes fires or	
	GSFC Report	
	events causing five or more injuries or impairs the mission readiness	
	3C Explosives Mishaps/ Explosion. Any ammunition or	UO Danasi
	explosive mishap that causes casualties or serious property	HQ Report
	damage	
	Weapons Discharge, Deliberate or accidental discharge of a	HQ Report
	small arms weapon which results in injury or death	rry report
4. Security Events	4A. Terrorism, Terrorist Activity Any event/incident involving	GSFC Report
·	terrorism or the threat of terrorism.	*
	4B. Civil Unrest, Any disturbance (anti-US demonstration, riot,	GSFC Report
	panic, strike, etc.) against or on a WFF managed activity that	'
	may cause any news coverage.	
	4C. Security compromise. Any violation of security systems or	GSFC Report
	classified material	-
5. Natural Disasters	5A. Disasters, Natural. An earthquake, flood, hurricane,	GSFC Report
	fightening strike, snow storm, tornado, or any other natural	
	phenomenon that may impair the operational capability of WFF	

6.5 Meet-Me Line

A "Meet-Me Line" has been established for emergency coordination purposes. This service is available 24 hours a day, 7 days a week. To join, participants must have the participant pass code to join the meeting. This pass code can be obtained will be given out at the time of the emergency incident or emergency exercise by the WFF EOC.

- a. Participants access: Call toll free number 866-755-1124.
- b. To join a conference:
 - 1. You must use a touch-tone phone to participate in an instant meeting conference,
 - 2. Dial the appropriate access number,
 - 3. Enter numeric pass code (obtain code from the WFF EOC).

6.6 Emergency Public Information

- a. In time of emergency, the PAO will coordinate the release of information on disasters affecting WFF when they occur.
- b. When a disaster is impending or occurs, the PAO staff will be positioned in the WFF EOC, which has a designated area equipped for this function. The staff may also be asked to supplement local government Public Information Officer (PIO) efforts or to provide PIO support in the field at the disaster site.
- c. In the event of a substantial disaster, which would trigger a Presidential Declaration, the PAO will work with other Federal and State personnel to provide news to the media at a State/Federal Joint Information Center (JIC).

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7.0 SUPPORTING TECHNOLOGIES

Given the likelihood of incidents at other NASA Centers and facilities throughout the nation, WFF has identified the following unique technologies and capabilities available here at WFF that are available to provide support to national or NASA emergencies.

- NIMS Trained Personnel
- Satellite Telephone Capability
- HF Radio Capability
- "WebEOC" web-enabled Crisis information management system software

APPENDIX A - WFF TRAINING AND EXERCISE PLAN

A.1 Exercises and briefings are coordinated and provided by the Emergency Management Coordinator, or those designated. The following matrix details the requirements and accomplishment of these actions. Any action will be tracked in an approved action tracking database until closure. Single scenario exercises will be scripted into individual exercise plans.

Table 6.A - Training and Exercise Requirements Matrix

Requirement	When	Who Receives
Alert and Notification Quarterly Drill		All members of Incident Command and designated emergency response personnel
Functional WFF (single scenario) exercise	Annual (Before June 1)	All members of Incident Command
Table Top Exercise	Annual (Before June 1)	Selected Incident Command Personnel
COOP Awareness Brief Annual		All NASA WFF Employees
Disaster Preparedness Brief	Annual (before June 1)	All NASA WFF Employees
Communications Test	Annual	EOC personnel
COOP Training	Annual	Designated COOP personnel
Functional Agency-Wide Exercise	Biennial	All members of Incident Command

A.2 The following matrix provides the details for individual training. The Emergency Coordinator will manage the training and report to NASA HQ, as required.

Table 7.A – WFF Individual Certification Training Requirements

Training Requirement	When	Who	Source
ICS-100 ICS-200	All accionad mambars of EOC		FEMA web-based courses http://training.fema.gov/ EMIWeb/IS/IS100A.asp http://training.fema.gov/ EMIWeb/IS/IS200b.asp
ICS-300 ICS-400	When given on-site	Designated members of the EOC and Incident Command Leadership	On-site course provided by qualified instructors
ICS-700	Upon Assignment	Facilities Manager Coordinator Fire Captains Security Officer Security Project Manager Security Operations Manager Security Investigator Security Shift Captains Facility Safety Leads Environmental Leads Industrial Hygiene Leads Emergency Response Team Leads	FEMA web-based course http://training.fema.gov/ EMIWeb/IS/is700a.asp
ICS-700 and IS- 800	Upon Assignment	Emergency Coordinator Incident Commanders Environmental Officer Safety Officer Medical Officer	FEMA web-based courses http://training.fema.gov/ EMIWeb/IS/is700a.asp http://training.fema.gov/ EMIWeb/IS/IS800b.asp

APPENDIX B - WFF FUNCTIONAL ANNEXES OF HAZARD SPECIFIC PLANS

- B.1 Functional annexes are the parts of the WFF EOP that provide specific information and direction. These annexes focus on operations: what the function is and who is responsible for carrying it out. While the basic plan provides information relevant to the Emergency Operations Plan as a whole, these annexes emphasize responsibilities, tasks, and operational actions that pertain to the function being covered. These annexes cover, in general terms, the activities to be performed by anyone with a responsibility under the function. The annex identifies actions that not only ensure effective response but also aid in preparing for emergencies and disasters.
- B.2 Table 8.B lists the Wallops Flight Facility, Functional Annexes, Plan Number, and Link to Plan.

Table 8.B - WFF Functional Annexes

TITLE	PLAN NUMBER
AIRCRAFT MISHAP RESPONSE PLAN	803-PLAN-0001
This plan establishes the responsibility and procedures to effectively and safely respond to and mitigate the effects of any aircraft mishap occurring at or near the Wallops Flight Facility (WFF). Plan outlines the procedures and responsibilities for the safe and effective handling of aircraft emergencies at or near WFF.	
HURRICANE / NOR'EASTER PLAN	803-PLAN-0002
This plan provides for an effective and coordinated response in the event of a hurricane or significant Nor'easter. The goal for this plan is to protect life, preserve government assets, and to quickly return to the conduct of our missions. This plan addresses the procedures to prepare projects for storm impacts, the closure of the Island, and support to the local community.	
WFF SNOW PLAN This Plan describes the process and roles and responsibilities to determine if the NASA Wallops Flight Facility (WFF) will have a delayed opening, a closure, or an early closure related to inclement snow and/or ice weather conditions. The goal of this Plan is to balance the conduct of WFF's mission with the safety of our employees. The main criterion is to ensure the safety of employees while on WFF, with the second criteria being a reasonably safe commute to the WFF	WFF Snow Plan, https://wiims.wff.nasa.gov/wiims- wiki/en/Wallops Snow Plan

CONTINUITY OF OPERATIONS PLAN (COOP) IMPLEMENTATION PLAN

The Wallops Flight Facility (WFF) COOP provides procedures and guidance to ensure the continuation of WFF essential functions in the event that the WFF facility is threatened or incapacitated requiring the relocation of selected WFF personnel to an alternate site. Note: This procedure is deemed "Sensitive But Unclassified (SBU)" and must be obtained from official sources.

This plan is Sensitive But Unclassified (SBU). Contact NASA Emergency Coordinator at x1159

LAUNCH INCIDENT PLAN

This plan provides information on what actions to take in the event of a launch accident occurring at or near Wallops Island. While this plan outlines the minimum requirements, Orbital Class vehicles will require special attention to the implementation elements. This plan is changed for each individual launch to deal with the specific hazards of that launch. Launch Specific Plans developed for specific for each launch

This plan is Sensitive But Unclassified (SBU). Contact NASA Emergency Coordinator at x1159

SECURITY EMERGENCY PROCEDURES

This procedure highlights security emergency procedures at WFF. Note: This procedure is deemed "Sensitive But Unclassified (SBU)" and must be obtained from official sources.

803-PLAN-0007

This plan is Sensitive But Unclassified (SBU). Contact NASA Emergency Coordinator at x1159

SEVERE WEATHER NOTIFICATION

The purpose of this Plan is to provide instruction to the Wallops Flight Facility (WFF) Weather Office for notifying personnel of impending severe weather conditions.

840-WI-8715.1.1

PANDEMIC RESPONSE PLAN

The Goddard Space Flight Center (GSFC) Pandemic Plan provides for the protection of employees, facilities, and equipment while ensuring the continuance of designated priority functions for as long as possible during a pandemic event. The plan outlines the actions, roles, and responsibilities associated with preparedness, response and recovery should a pandemic threaten WFF. This plan is an annex of the GSFC COOP Plan.

Located in the GSFC COOP plan.

This plan is Sensitive But Unclassified (SBU). Contact NASA Emergency Coordinator at X1159

WFF INTEGRATED CONTINGENCY PLAN This plan describes measures implemented by NASA to prevent oil spills from occurring and to prepare NASA to respond in a safe, effective, and timely manner to mitigate the impacts of a discharge. This plan also serves to minimize hazards to human health and the environment from any accidental release of oil or hazardous substance to the air, soil, surface water, or sanitary sewer system at WFF.	Plan 37.01.01.13697 http://sites.wff.nasa.gov/code250/documents.html
MOUs, MOAs, and Joint Operating Procedures Memorandum of Understanding and Space Act Agreement for Mutual Aid response with Accomack County	Space Act Agreement Mutual Aid Agreement

APPENDIX C - EVACUATION PROCEDURE

C.1 PURPOSE

This Procedure describes the provisions that have been made to ensure the safe and orderly evacuation of people threatened by the hazards WFF faces.

C.2 CONCEPT OF OPERATION

- a. WFF is one of many coastal localities in Virginia for which hurricanes and significant Nor'easters may present a major hazard. If a hurricane occurs in eastern Virginia, the coastal areas of Accomack County, including the entire WFF, are likely to be severely affected by storm surge flooding. If a severe hurricane made landfall in Accomack County, the storm surge at Wallops Island could reach almost 20 feet above sea level. The entire island could experience major damage. All island personnel shall be evacuated if a major hurricane threatens the area. Nor'easters present similar hazards, and this plan shall be used as appropriate.
- b. This procedure shall be implemented under the direction of the WFF Director based upon government advisories and information provided by the WFF Weather Office and the WFF Emergency Coordinator.

C.3 RESPONSIBILITIES

C.3.1 WFF Director:

The WFF Director Shall:

- a. Issue orders for evacuation after consulting with the WFF Emergency Coordinator.
- b. Activate the WFF COOP if the situation warrants.

C.3.2 Emergency Operations Personnel Shall:

- a. Activate the EOC for coordination of evacuation efforts.
- b. Maintain contact with Greenbelt EOC and inform HQ of the WFF evacuation.
- c. Requests security to sweep island, mainland and main base to ensure evacuation is complete.

C.3.3 All WFF Personnel

- a. During flood conditions, personnel shall:
 - (1) Not attempt to cross flowing streams or drainage ditches by foot.
 - (2) Not drive over flooded roads except in authorized vehicles.

- (3) Abandon stalled vehicles in flowing or rising waters and seek higher ground.
- b. After flooding in an area, personnel should:
 - (1) Not handle or operate electrical equipment in wet areas until it has been checked and dried by authorized personnel.
 - (2) Use flashlights to examine facilities since gas or flammables may be released inside.
 - (3) Be especially watchful for snakes, or other wild game (especially on the island) since rising waters force these creatures into areas they do not normally occupy.

C.4 EVACUATION ROUTES



Figure 1.C - Island Evacuation Routes

Heavy Red Line represents major evacuation routes.



Figure 2.C - Main Base Evacuation

Heavy Blue Line represents major evacuation routes.

Heavy Dashed Black Line represents an alternate evacuation route that requires special coordination to open.

C.5 PROCESS

The NASA Emergency Management Coordinator will maintain primary and alternate contacts in WebEOC or NASA ECHO or ENS systems, for management of each Directorate personnel. These personnel have been instructed on notification system procedures. To activate the telephone notification tree, the Emergency Management Coordinator calls the top three blocks (200, 800, Navy Surface Combat System Center (SCSC) Duty Officer), including the Director of WFF. Each block on the top of the notification tree calls the corresponding block underneath. The bottom blocks (100, NOAA, U.S. Coast Guard) will call the Emergency Management Coordinator back to ensure that the chain was not broken or to report anyone they did not contact. Personnel must continue calling until they speak to a person, not an answering machine. Once notified, it is the organizational contact's responsibility to notify his/her Organization Chief and initiate the respective Organization Phone Tree.

NOTE: Each organization is responsible for notifying all personnel within its organization. Example: Director – Branch, with the last person in each level calling back to the top. This ensures that the process was not broken and is a means of reporting who was not notified. Last block in each column notifies the NASA Emergency Management Coordinator in the WFF EOC to ensure each organization has been notified and the pyramid was not broken.

Note: The EOC will use Table 5 in section 6.3 for reporting of incidents to GSFC or NASA HQ.

Director of Telephone Notification WFF, Tree **PAO** 800 **NSROC NOAA** Navy SCSC BaySys 200 WICC **Duty Officer ROC MEC EOC** 500 U.S. Coast 400 **CSC NENS** Guard **Duty Officer** NOAA 600 **EOC EOC** 100 **EOC**

Table 9.C - WFF Telephone Notification Tree

Note: The director or assistant director of each code should be who is notified. BaySys, MEC, NOAA, NSROC, ROC, CSC, WICC, NENS, Navy SCSC, and U.S. Coast Guard contact numbers as well as directorate numbers can be found at the following website: http://phone.wff.nasa.gov/

APPENDIX D - RECOVERY PROCEDURE

D.1 PURPOSE

This WFF Recovery Procedure is developed for use by WFF departments and tenants located at WFF to ensure a timely recovery from catastrophic disasters that affect WFF operations. This procedure identifies actions to be taken and the assistance available to support the return to normal conditions.

D.2 CONCEPT OF OPERATIONS

This procedure is predicated upon the concept that response and recovery operations will begin at the facility level and work in conjunction with operations determined by the NASA COOP Recovery Plan, GSFC Policies and Procedures, the State of Virginia, and local governments. Assistance will be requested when the needs exceed the capability of WFF departments and tenants. Assistance will be requested through GSFC/Greenbelt to NASA Headquarters. Federal assistance is assumed to be supplemental to that of NASA and local governments, and is available upon approval of a request by the Governor to the appropriate Federal agency or to the President of the United States.

- a. The Recovery efforts at WFF have been developed to utilize NIMS standards and the NRF. It is anticipated that continued NIMS training will be provided so that a common understanding and agreement of how to proceed will prevail.
- b. Preparations to implement this plan will begin as soon as feasible. In cases when there is sufficient warning prior to the event, the recovery phase planning shall begin in the response phase and continue throughout the emergency operation.
- c. Planning for recovery will begin during response however the decision for when recovery will commence is made by the WFF Director taking into account safety of the Recovery Team and the criticality of the mission requirements. Initial direction will come from the EOC/IC.
- d. In the event that long-term recovery is necessary, the EOC may be deactivated; prior to EOC deactivation, a Recovery Team will be formed to complete the recovery process. This team will consist of the EMT, chaired by the WFF Director, plus other specialists as needed.

D.3 PROCEDURES

The following steps will be taken for recovery operations:

a. Implement Damage Assessment Teams (on-base) – this will be done in the first 24 to 48 hours

- b. Determine the scope of damage and assess hazards (see tables at the end of this attachment) and identify hazards that require correction prior to restoration efforts
 - Stability of roads and bridge to island
 - Status of utility systems (Mainbase, Mainland and Island)
 - Buildings and structures that are unsafe (critical buildings will be assessed first)
 - The presence of hazardous materials
 - Ability to maintain security of assets and facility
- c. Report of damage listing of discrepancy for each area will be provided to the EMT (see tables at end of this attachment)
 - Status of Utilities
 - Number of buildings destroyed
 - Number of buildings with significant damage
 - Number of buildings with minimal or no damage
 - Status of mission assets
 - Ground Network
 - Range Instrumentation
 - Launch Pads
 - Aircraft and Airfield
 - Any areas requiring additional study
- d. Evaluate the potential for multiple responses in the event of a launch accident and establish a staffing plan and proposed pre-staging sites for emergency responders.
- e. Evaluate Command, Control, and Communication in accordance with the principles of ICS. If the hazards have the potential to exceed the installation boundaries, establish a UC with appropriate Accomack County and Virginia State Officials.

Table 10.D – Initial Damage Assessment

Initial Damage Assessment Quick Windshield Survey									
Date				Pageof		Inc	Incident Type:		
Bldg#	Locatio Main land	m: MB	Island	Structure Type	Damages: Minimum Major destroyed	Roof Intact Y/N	Windows Intac t Y/N	Habitable? Y/N or DK	Notes
YWWW.		WWW.hatty.chandaday.com							
		mary HAMP Concessed for a comment of the concessed for a comme	The state of the s						
Assessment Completed By:									
*Damages: Minimum = 10% or Under, Major = 74%, Destroyed = 75%+									

Table 11.D - Fly-Over Damage Assessment

Initial Damage Assessment Fly-Over Survey

- 1) Utilize attached maps to indicate areas of damage and debris 2) Note conditions of bridges

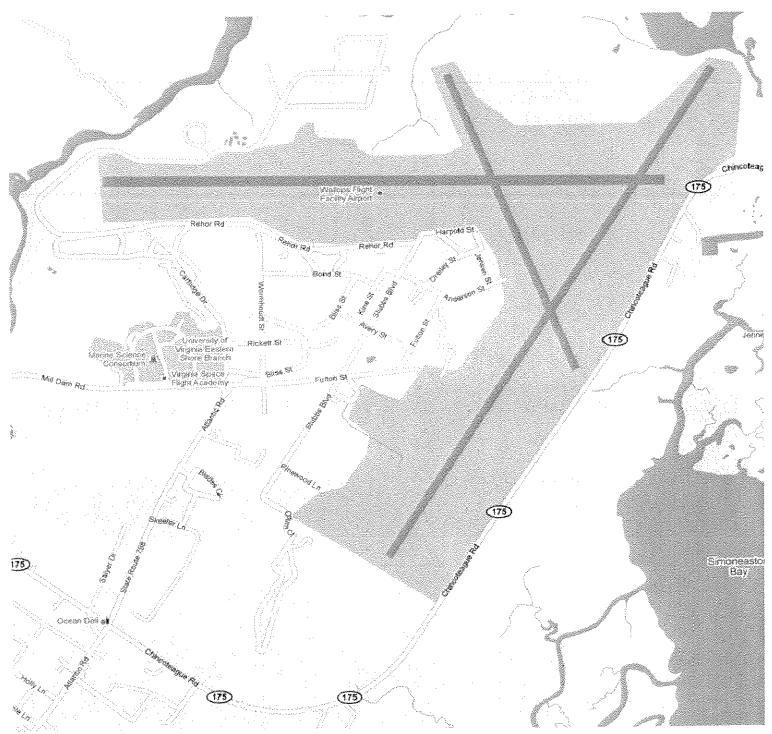
3) Complete the form below to note conditions of buildings visible from air									
Date			Pageof		Incident Type:				
Bldg#	Location Main land	m: MB	Island	Structure Type	Damages: Minimum Major destroyed	Roof Intact Y/N	Windows Intac t Y/N	Habitable? Y/N or DK	Notes
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~									
				The state of the s					
			· · · · · · · · · · · · · · · · · · ·						
			A THE STATE OF THE						and the second s
Assessment Completed By:									
*Damages: Minimum = 10% or Under, Major = 74%, Destroyed = 75%+									

Mark locations of damage and debris Bogues Bay Cycler day Vomans Bay riammock

Figure 3.D – Damage Assessment Map – Island and Mainland

Figure 4.D – Damage Assessment Map – Main Base

Mark Locations of damage and debris:



# Table 12.D – Walk-Through Damage Assessment

Walk – Through Damage Assessment		
Date:		
Assessment Team Members:		
Building:		
Structure Type:		
Number of Floors:		
Number of floors inspected:		
Items Checked:	Yes	No
Does the building appear to be structurally intact?		
If no describe damage:		
Are the windows and doors intact?		
<ul> <li>If no, approximately what percent of windows / doors are missing?</li> </ul>		
Is the power on in this building?	***************************************	
Are wires visible, hanging or otherwise amiss?		
Is the water system damaged in this building?		
Is there water dripping from the ceiling?		
• If yes, give location(s):		To many or and a state of the s
	Victoria de la constanta de la	
Can you see water damage to the ceiling?		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Can you see water damage to the walls?		
Can you see water damage to the floors?		
Is the building useable in its current condition?		
Note any other features of this building that will have to be replaced/r	epaired:	
		Hereditare Le
		And incident
		bosodinase as

# Table 13.D – Damage Assessment Summary

	Damage Asses	ssment Summary	
Bridge Assessment:			
Causeway Assessment:			
Main Base / Island / Ma			
Type	Nu	mber	Notes
Buildings w/Minimal Damage			
Buildings w/Major Damage			
<b>Buildings Destroyed</b>			
Buildings Flooded			
Buildings w/Missing Roo	ofs		
Amount of Debris – Circ One:	Medium Light		
		ilities	T 37
Utility	<u> Island</u>	Main Base	Mainland
Electric			
Water			
Wastewater			

### APPENDIX E - HAZARDOUS MATERIALS (HazMat) RESPONSE

### E.1 PURPOSE

To ensure implementation of the WFF-EOP, this appendix provides information on emergency response procedures for response, control, clean up, and reporting of HazMat releases or spills requiring external response resources, such as HazMat response teams and HazMat clean-up teams.

### E.2 CONCEPT OF OPERATIONS

- a. Hazardous materials are received and handled at numerous work sites each day in amounts varying from several ounces of relatively benign substances to thousands of gallons of toxic, flammable, and/or explosive materials. Transportation of these materials may be by contractor or government vehicles, using the common road system. There are no prescribed HazMat routes for these non-bulk commodities.
- b. When any unplanned release or condition resulting from an accidental or intentional spill or accumulation of hazardous waste or material in concentrations or quantities sufficient to pose a substantial, actual or potential hazard to human health, mission impact, property, or the environment and cleanup/recovery is beyond the capability of the reporting agency, the WFF fire department will be called at 911 OR 757-824-1333 to respond to the incident.
- c. Fire Department response will include utilization of the WFF Integrated Contingency Plan # 37.01.01.13697, which is available from the WFF Environmental Office. This plan describes measures implemented by NASA to prevent oil spills from occurring and to prepare NASA to respond in a safe, effective, and timely manner to mitigate the impacts of a discharge. This plan also serves to minimize hazards to human health and the environment from any accidental release of oil or hazardous substance to the air, soil, surface water, or sanitary sewer system at WFF.
- c. Hazardous materials spill response will be in accordance with the Table 14.E of this Appendix.

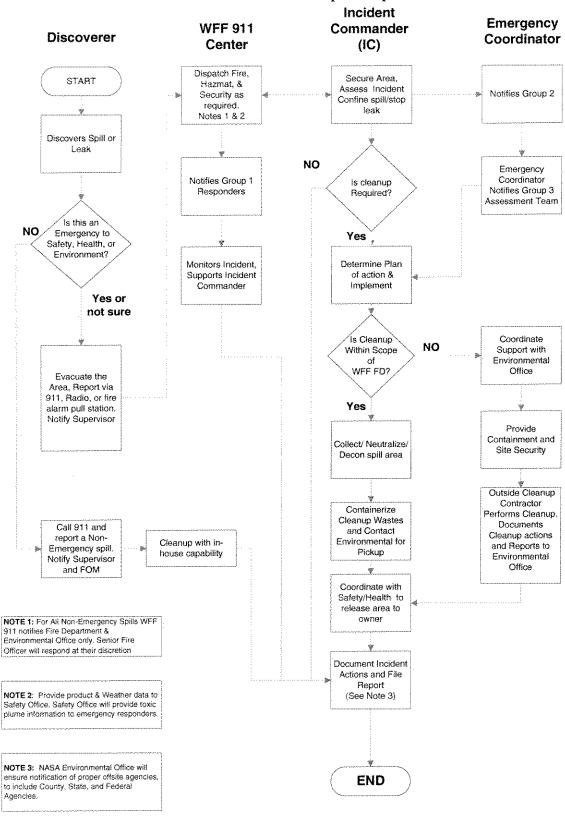


Table 14.E - Hazardous Material Spill Response Flow Chart

### E.3 SPECIFIC HAZARD PROCEDURES

### E.3.1 Oil/HazMat Release Emergency Actions:

Oil and other hazardous materials are handled and received at numerous work sites on WFF. Commercial vessels refuel and moor in the Visitor Center, Building J-20 area. The potential exists for a spill to occur into or on waters or the shoreline adjacent to WFF. WFF has numerous beaches, tidal flats, marshes, wet lands, and other environmentally sensitive habitats for many threatened or endangered species of plant or animal life.

- a. The response must comply with EPA and Virginia law for spill-on-water response by deploying containment equipment on the water within 1 hour after discovery of the discharge.
- b. Provide technical administration of Fire Protection Services, ensuring that personnel, equipment, supplies and training are available.
- c. The attached checklist to this appendix, Table 15.E, shall be used for emergency response when a Hazmat incident is identified.
- c. Discoverer of spill incident should:
  - 1. Verbally alert others in the area
  - 2. Activate emergency alarms, if appropriate
  - 3. Isolate and contain any spillage that can be accomplished

# Table 15.E – Spill Response Checklist

Ste	P	Yes	N/A
Ste	p 1: Site Evaluation and Management		
1.	SFO on scene is the Incident Commander (IC)		
2.	Initial response elements (IRE) arrive on scene		
<del></del> -	IC establishes an on-scene command post		
4.	IC directs WICC Environmental Office response		
5.	IC activates follow-on elements, as required		
6	Emergency Dispatch (911) notifies appropriate agencies (e.g. WFF		
	Environmental Office, Security Office)		
	p 2: HAZMAT Identification		<b></b>
1.	Form Oil/HazMat Reconnaissance Team		
2.	IC identifies hazards with help from Safety Office	:	
	p 3: Hazards and Risks Evaluation		
	IC evaluates Reconnaissance Team's findings		
<u>2.</u>	Safety Office advises IC on all health hazards		
	p 4: Plan the Emergency Response		
1.	IC consults with Safety Office and specifies level of PPE		
2.	Proper Personal Protective Equipment (PPE) is selected for the type of		
	hazards present		**************************************
Ste	p 5: Plan the Emergency Response		
1.	IC and CSS identify options and hazards		
2.	IC implements most appropriate option		
3.	Additional resources available through WFF 911 Center		
4.	Plan reflects operational priorities:		
	a. Prevention of fire/explosion and loss of life		
	b. Protection of environmentally sensitive shoreline areas spill		
	c. Containment/capture of spill		
	d. Isolation of facilities/vessels from spill effects		***************************************
5.	Plan consists of two staged responses		
	a. Stage 1: Initial reconnaissance and containment conducted by fire		
	department HazMat team		
	b. Stage 2: Containment, clean up, decontamination, and recovery		•
	conducted by Spill Clean Up Team or outside contractor		
	ep 6: Containment and Control Operations		***************************************
1.	Conducted by the Fire Department and the HazMat team		
2.	Objective is to safely begin containment within 1 hour of notification		
3.	Emergency Department (911) center notifies U.S. Coast Guard		
- una	requesting surveillance and perimeter security		
	ep 7: Cleanup and Decontamination		
1.	Response phase ends		
2.	IC demobilizes Initial Response Elements (IRE) assets		· 
3.	IC transfers command and control to cleanup agency (WICC Spill Clean		

	Up Team or contractor)		
4.	Cleanup operations include:		
Pr. Subbarran	a. Operation of skimmers and vacuum truck		To the second se
	b. Deployment/retrieval of absorbents		
	c. Removal of oil residue	and an area	
	d. Temporary storage of oil	THE PARTY NAMED IN THE PARTY NAM	
	e. Cleanup of equipment		
Ste	p 8: Termination – Recovery and Reporting		
1.	NASA Environmental Office prepares and distributes Pollution Incident		
	Reports (PIR) for WFF		
2.	Media releases handled by WFF PAO		

### E.4 TRAINING REQUIREMENTS

WFF emergency response agencies must comply with Hazardous Waste Operations and Emergency Response (HAZWOPER) Training, Section 29 CFR 1910.120(q), depending on an employee's function during a HazMat incident and the operation zones in which their function is performed (i.e., hot zone, warm zone, or cold zone). Training will be maintained with each contractor who would be involved in a HazMat incident. The required training is as follows:

- a. First Responder Awareness Level
- b. First Responder Operational Level (warm zone, personnel decontamination)
- c. HazMat Technician Level (fire department HazMat team)
- d. HazMat Specialists Level

IC Level (SFOs and ICs) (*Note:* Most responders that do not enter the cordon [cold, warm, or hot zone] require only Hazard Communication or First Responder Awareness Level training. The only exception is the HazMat IC who requires awareness, operations, and Incident Management training.)

### APPENDIX F - DEFINTIONS & ACRONYMS

**Biological Incident** – A human disease outbreak of a naturally occurring biological disease (communicable or non-communicable) or as a result of terrorist activity.

**Chemical Incident** – The release or threatened release of toxic chemicals to cause illness or death in people, animals of plants.

Disaster - An occurrence causing widespread destruction or distress.

Emergency – An unexpected, serious occurrence or situation requiring prompt action.

Emergency Management Coordinator - The WFF Emergency Management Coordinator is appointed by the Director of WFF and is responsible for coordinating all emergency activities involving WFF personnel in accordance with this plan. The WFF Emergency Management Coordinator (or his/her representative) has overall authority and responsibility for conducting incident operations and is responsible for the management of all operations at the incident site. Responsibilities include developing an effective organizational structure, allocating resources, making appropriate assignments, managing information, and achieving the basic objectives of the Incident Action Plan.

Emergency Operations Center – The area designated as the control center from which coordination of resources in support of emergency incidents is exercised and maintained.

Emergency Response Team – A team of selected employees who will respond to provide assistance in emergency/disaster situations.

**Hazmat** – Hazardous materials. The National Response Plan (NRP) defines Hazmat as a substance or material, including a hazardous substance, that has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated (see 49 CFR 171.8). The term is also intended to mean hazardous substances, pollutants, and contaminants as defined by the National Oil and Hazardous Substances Pollution Contingency Plan.

**Incident Commander** – Person designated by the WFF Emergency Coordinator who assumes command and control of all personnel, equipment and apparatus at the emergency/incident scene. The Incident Commander assumes the role of commander and manager operating at the strategic level.

**Incident Command System** – A standardized, on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating with a common organizational structure, designed

to aid in the management of resources during incidents. ICS is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, or organized field-level incident management operations.

**Multiagency Coordination** – Multiagency coordination systems provide the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. The components of multi-agency coordination systems include facilities, equipment, EOCs, specific multiagency coordination entities, personnel, procedures, and communications. These systems assist agencies and organizations to fully integrate the subsystems of NIMS.

**Mutual Aid** – The participation in an agreement with local government organizations for the purpose of mutually consenting to aid one another in the event of an emergency.

National Incident Management System (NIMS) - A system mandated by Homeland Security Presidential Directive (HSPD-5) that provides a consistent, nationwide approach for Federal, State, local, and tribal governments; the private sector; and Nongovernmental organizations to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, local, and tribal capabilities, NIMS includes a core set of concepts, principles, and terminology. HSPD-5 identifies these as ICS; multi-agency coordination systems; training; identification and management of resources; qualification and certification; and the collection, tracking, and reporting of incident information and incident resources.

**National Response Framework (NRF)** – A guide to how the nation conducts an all-hazards response. It is built upon scalable, flexible, and adaptable coordinating structures to align key roles and responsibilities across the Nation, linking all levels of government, nongovernmental organizations, and the private sector.

**Radiological Emergency** - The onset of symptoms requires days to weeks and there typically will be no characteristic signatures. Radiological materials are not recognizable by the senses, and are colorless and odorless.

**Vital Records** - All records (regardless of physical form) required by Government policy or contract to be protected.

### 803-PLAN-0003 Rev A

Acronyms

CFR Code of Federal Regulations

COOP Continuity of Operations Plan

CSS Contingency Support Staff

DHS Department of Homeland Security

EOP Emergency Operations Plan

EMT Executive Management Team

EMTG Emergency Management Task Group

ENS Emergency Notification System

EOC Emergency Operations Center

EPA Environmental Protection Agency

EWS Emergency Warning System

FEMA Federal Emergency Management Agency

GPR Goddard Procedural Requirement

GSFC Goddard Space Flight Center

HAZMAT Hazardous Material

HAZWOPER Hazardous Waste Operations and Emergency Response

HSPD Homeland Security Presidential Directive

IAP Incident Action Plan

IC Incident Commander

ICS Incident Command System

IRE Initial Response Elements

IT Information Technology

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NIMS National Incident Management System

NOAA National Oceanic and Atmospheric Administration

NPD NASA Policy Directive

NPR NASA Procedural Requirements

NRF National Response Framework

NRP National Response Plan

OHCM Office of Human Capital Management

PAO Public Affairs Office

PIO Public Information Officer

PIR Pollution Incident Report

PPE Personal Protective Equipment

SFO Senior Fire Official

SITREPS Situation Reports

UC Unified Command

WICC Wallops Institutional Consolidated Contract

# **Change History Log**

Revision	Effective Date	Description of Changes
Baseline	8 Dec 2009	Initial Release
A		Annual Review Jan 10 th 2011, Changed document title from Emergency Management Plan to Emergency Operations Plan and changed all references to reflect this change, Numerious grammatical corrections, added ROC to call tree, added to Roles of the Emergency Coordinator to correlate with changes to GPR 8715.6, changed 3.3.1 from Incident Commander to EOC Manager, added new damage assessment maps.

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